

REMARKS

Applicant wishes to thank Primary Examiner Lee for the courtesy of a phone conference on March 4, 2010. Examiner Lee indicated that Claims would overcome the current prior art of record if amended to clarify the term “filtering application information.” Applicant has amended the Claims to clarify the term “filtering application information.”

Applicant has amended the specification and drawings to correct, for example, typographical errors which occurred during the translation of the Application from the Japanese Patent Application No. 2003-398981 (Japanese Unexamined Patent Application Pub. No. 2004-336705). No new matter was added. The present Application claims the benefit of the Japanese Patent Application No. 2003-398981.

The present invention uses filtered pictures as reference pictures while the unfiltered pictures are used when the pictures are films, such as movies. This allows the block noise and the film grains to be reduced for the reference pictures so that coding efficiency can be enhanced. However, the present invention also allows film grains to remain for the output pictures so that picture quality of the film is not impaired. (Pg. 27, ln. 29 – Pg. 28, ln. 7) Thus, the present invention allows dynamic selection of filtered or unfiltered pictures based on the material of the pictures.

The Office Action rejected Claims 26 – 28 and 32 – 34 under 35 U.S.C. § 103 as being obvious over Applicant’s Admitted Prior Art (“AAPA”) in view of *Kiyoshi et al.* (JP 63-199589)

The Office Action admitted on Page 3 that AAPA does not teach or suggest

[O]utputting the decoded picture, using an outputting unit, in the case where the filtered picture is the reference picture and the filtering application information indicates the decoded picture is outputted for the display process.

AAPA also does not teach or suggest

[E]xtracting, using a demultiplexing unit, filtering application information from the bitstream, the filtering application information specifying a picture and indicating which one of the decoded picture before the filtering and the filtered picture after the filtering, is outputted for a display process as the specified picture.

AAPA discloses the use of the selection information. However, the selection information is used by the switch 504 for selecting an output of the inter-picture prediction unit 502 or an output of the intra-picture prediction unit 503. (FIG. 17). The selection information is different from the filtering application information. The filtering application information determines whether to select the filtered output of the inter-picture prediction unit/output of the intra-picture prediction unit or an unfiltered output of the inter-picture prediction unit/output of the intra-picture prediction unit. As can be seen in FIG. 17, there is no switch present to select between the filtered output of the inter-picture prediction unit/output of the intra-picture prediction unit.

Kiyoshi also does not remedy the deficiencies of AAPA. *Kiyoshi* selects between the unfiltered picture and the filtered picture based on the magnitude of the motion vector and not the filtering application information. The magnitude of the motion vector information indicates which part of which picture is used as the reference image in motion compensation. The magnitude of the motion vector is not the same as the filtering application information. This is because *Kiyoshi* is directed at improving visual resolution of still pictures or pictures with a small amount of motion and does not recognize the problems of deterioration of film (movie) texture produced by film grains throughout the entirety of a video.

In contrast, the present invention is aimed at improving coding efficiency and maintaining (not degrading) the texture in film (movie) produced by film grains. The present invention does not use motion vectors. Instead, the present invention allows the filtered or

unfiltered picture to be selected based on the filtering application information. The filter application information, for example, can be a number indicating which picture to be outputted, either filtered or unfiltered as seen in FIG. 11 of the present invention.

For example, the numbers 1 – 5 can be used in one embodiment. The number “0” can mean that the unfiltered pictures for each of the pictures in the stream are outputted. The number “1” can mean that the filtered pictures for each of the pictures in the stream are output. The number “2” can mean to output the unfiltered pictures for the picture specified by the filter application information. The number “4” can mean to output the unfiltered picture for a picture specified by the filter application information and the pictures following the specified picture. The number “5” can mean to output the filtered picture for a picture specified by the filter application information and the pictures following the specified picture. (Pg. 28, Ins. 14 – 29)

As noted in the MPEP at §2143.02:

A rationale to support a conclusion that a claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395 (2007); *Sakraid v. AG Pro, Inc.*, 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152, 87 USPQ 303, 306 (1950). (underline added)

All arguments for patentability with respect to Independent Claim 26 are repeated and incorporated herein for Independent Claim 32.


Furthermore, Dependent Claims 27, 28, 33, and 34 depend from and further define Independent Claims 26 and 32 and are thus allowable, too.

Accordingly, it is believed that the present case is in condition for allowance and an early notification of the same is requested.

If the Examiner believes a telephone interview will further the prosecution of this case, the undersigned attorney can be contacted at the listed phone number.

Very truly yours,

SNELL & WILMER L.L.P.



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